Claims

What is claimed is:

1. A system that facilitates non-linear viewing of media, the system comprising:

a scene selector that scans a digitized media and selects a scene in the digitized media;

a metadata generator that produces metadata associated with the selected scene and relates the metadata to the selected scene; and

an organizer that places the selected scene and the metadata in a media store to facilitate non-linear viewing of one or more scenes.

2. The system of claim 1, where the scene selector selects a scene based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition and theme recognition.

3. The system of claim 2, where the scene selector selects a scene based, at least in part, on an input from a user.

4. The system of claim 3, where at least one of the face recognition, item recognition, voice recognition, color recognition, mood recognition and theme recognition is adapted by a machine learning technique based, at least in part, on the input from the user.

5. The system of claim 1, where the metadata generator produces at least one of, a date, a time, a length, a subject, a mood, a theme, a color, a person name, a set of person names, an item name and a set of item names associated with the scene.

6. A method that facilitates non-linear viewing of media, comprising:

selecting a scene from a set of digitized media;

annotating the selected scene with metadata; and

storing the annotated scene to facilitate non-linear retrieval of the annotated scene.

7. The method of claim 6, where selecting the scene from the set of digitized media comprises:

manually scanning one or more scenes from the set of digitized media; and

manually selecting the scene.

8. The method of claim 6, where selecting the scene from the set of digitized media comprises:

automatically scanning one or more scenes from the set of digitized media; and

automatically selecting the scene based on at least one of face recognition, item recognition, voice recognition, color recognition, mood recognition and theme recognition.

9. The method of claim 6, where annotating the selected scene with metadata comprises associating at least one of, a date, a time, a length, a subject, a mood, a theme, a color, a person, a set of people, an item and a set of items with the selected scene.

10. The method of claim 6, where storing the annotated scene to facilitate non-linear retrieval of the annotated scene comprises storing the annotated scene in at least one of, a database and a datacube.

11. A system for generating a playlist of media items to facilitate non-linear viewing of the media items, comprising:

a scene retriever that retrieves one or more scenes and one or more pieces of annotating metadata associated with the one or more scenes from a media store;

a metadata analyzer that analyzes the one or more pieces of annotating metadata to identify one or more relationships between the one or more pieces of annotating metadata; and

a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes.

12. The system of claim 11, where the scene retriever retrieves a scene based, at least in part, on a value stored in the one or more pieces of annotating metadata.

13. The system of claim 12, where the metadata analyzer computes one or more similarity values for the one or more relationships.

14. The system of claim 13, where the playlist generator produces the playlist of related scenes based, at least in part, on the similarity values.

15. A system for non-linear viewing of media, comprising:

a scene retriever that retrieves one or more scenes and one or more pieces of annotating metadata associated with the one or more scenes from a media store;

a metadata analyzer that analyzes the one or more pieces of annotating metadata to identify one or more relationships between the one or more pieces of annotating metadata; and

a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes.

one or more viewers for viewing a scene listed in the playlist;

one or more feedback receivers for receiving a feedback concerning the viewed scene; and

a playlist updater for updating the playlist based, at least in part, on the feedback.

16. The system of claim 15, where the one or more viewers comprise at least one of, an active device and a passive device.

17. The system of claim 15, where the one or more viewers comprise at least one of, an intelligent device and a non-intelligent device.

18. The system of claim 15, where the feedback comprises at least one of, a touch input, a typed input, a mouse input, a voice input and a facial expression input concerning the viewed scene.

19. The system of claim 18, where the feedback concerns a current scene and where the feedback comprises at least one of, a command to skip ahead in the playlist, a command to skip back in the playlist, a command to generate a new playlist, a command to find scenes similar to the current scene and a command to play a longer scene related to the current scene.

20. The system of claim 15, where the playlist updater adds and/or removes a scene from the playlist based on at least one of, a usage data, a feedback command and a time stamp.

21. A method for facilitating non-linear viewing of media, comprising:

selecting one or more stored scenes to view;

analyzing one or more first metadata associated with the one or more selected scenes; and

generating a playlist of stored scenes by evaluating one or more relationships between the one or more first metadata and one or more second metadata.

22. The method of claim 21 where selecting one or more stored scenes to view comprises at least one of, selecting a scene based on the presence of a face in the scene, selecting a scene based on the absence of a face in the scene, selecting a scene based on the presence of an item in the scene, selecting a scene based on the absence of an item in the scene, selecting a scene based on a voice in the scene, selecting a scene based on the absence of a voice in the scene, selecting a scene based on a mood of the scene and selecting a scene based on the theme of the scene.

23. The method of claim 22 where analyzing the one or more first metadata comprises computing one or more similarity scores for one or more pieces of metadata that hold information concerning at least one of a present face, a present item, a present voice, a mood and a theme.

24. The method of claim 23 where generating the playlist comprises placing one or more scene identifiers in the playlist.

25. A method for non-linear viewing of media, comprising:

displaying a scene stored in a playlist storing at least one scene and metadata associated with the scene;

receiving a user feedback related to the displayed scene;

reacting to the user feedback; and

if the user feedback commands an update to the playlist, selectively updating the playlist based, at least in part, on the user feedback.

26. The method of claim 25, where receiving the user feedback comprises receiving at least one of, a touch input, a typed input, a mouse input, a voice input and a facial expression input.

27. The method of claim 25, where reacting to the user feedback comprises at least one of, moving forward in the playlist, moving backward in the playlist, and displaying a media item related to the scene.

28. The method of claim 25, where updating the playlist comprises at least one of, adding a scene to the playlist and removing a scene from the playlist.

29. A method for facilitating non-linear viewing of media, comprising:

receiving feedback related to a viewed media scene;

if the feedback requests finding related scenes, finding related scenes by analyzing a metadata associated with the viewed scene;

if the feedback requests generating a new playlist of media scenes, calling a method for generating a new playlist; and

if the feedback requests navigating within a playlist, selectively skipping forward and/or backward in the playlist according to the feedback.

30. A system for annotating video media, comprising:

a media database comprising a playlist and one or more video segments, where the video segments are associated with an annotating metadata; and

an annotating tool that facilitates creating the annotating metadata and associating the annotating metadata with the video segments.

31. The system of claim 30, where the annotating metadata comprises at least one of, a date identifier, a time identifier, a videographer identifier, a face identifier, an item identifier, a voice identifier, a mood identifier and a theme identifier.

32. The system of claim 30, where the annotating tool generates the annotating metadata in response to a user input.

33. The system of claim 30, where the annotating tool automatically generates the annotating metadata based, at least in part, on a face recognition, an item recognition data, a voice recognition data, a mood data and a theme data.

34. The system of claim 33, where the annotating tool is adapted based on a machine learning technique based, at least in part, on a user input concerning the annotating metadata generated by the annotating tool.

35. A system for delivering media content, the system comprising:

a media data store comprising one or more metadata annotated, displayable items;

a presenter that presents a selected first displayable item from the media data store; and

a selector that selects a second displayable item from the media data store based, at least in part, on a relationship between a first metadata associated with the first displayed item and a second metadata associated with the second displayable item.

36. The system of claim 35, where the media data store is at least one of a database, a data cube, a list, an array, a tree and a file.

37. The system of claim 35, where the presenter is at least one of an intelligent display and a non-intelligent display.

38. The system of claim 35, where the presenter is at least one of an active display and a passive display.

39. The system of claim 35, where the selector selects a second displayable item based, at least in part, in response to a user response to the first displayable item.

40. The system of claim 39, where the user response is at least one of, a spoken word, a keystroke, a mouse click, and a facial expression.

41. A media annotation and retrieval system, comprising:

an annotator that annotates a set of media items with a metadata to facilitate retrieving media items related by the metadata;

a playlist generator that generates a playlist of media items related by a first metadata retrieved in response to a first query;

a presenter for presenting media items associated with the media item playlist; and

a playlist updater that updates the playlist based on a second metadata retrieved in response to a second query, where the second metadata is related to the first metadata.

42. A method for annotating and retrieving media items, comprising:

annotating a set of media items with a metadata to facilitate metadata based retrieval of one or more of the set of media items;

receiving a first query related to identifying a media item by a relationship between the media item and a metadata;

retrieving a first metadata responsive to the first query;

generating a playlist of related media items where the media items are related by one or more metadata items in the first metadata;

displaying one or more media items listed in the playlist;

receiving a second query related to identifying a media item by a relationship between the media item and a metadata;

retrieving a second metadata responsive to the second query; and

updating the playlist based on the second metadata.

43. A data structure that facilitates non-linear viewing of media items, the data structure comprising:

a first field that holds a media item; and

a second field that holds a metadata item related to the media item, where the metadata facilitates at least one of identifying the media item, locating the media item and locating a related media item.

44. In a computer system having a graphical user interface that comprises a display and a selection device, a method of providing and selecting from a set of graphical user interface elements on the display, the method comprising:

retrieving a set of graphical user interface elements, each of the interface elements representing an action associated with facilitating the non-linear display of media items;

displaying the set of interface elements on the display;

receiving an interface element selection signal indicative of the selection device selecting a selected entry from the set of interface elements; and

in response to the interface element selection signal, initiating processing to facilitate non-linear viewing of media based, at least in part, upon stored metadata.

45. A data packet adapted to be transmitted between two or more computer components that facilitate annotating a media and facilitate the non-linear viewing of the media, the data packet comprising:

a first field that stores a clip identifier that identifies a portion of a media;

a second field that stores a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier; and

a third field that stores data associated with the clip identified by the clip identifier.

46. A memory for storing data for access by a computer component, the memory comprising:

a data structure stored in the memory, the data structure holding:

a first field that stores a clip identifier that identifies a portion of a media;

a second field that stores a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier; and

a third field that stores data associated with the clip identified by the clip identifier.

47. A data packet adapted to be transmitted between two or more computer components that facilitate the non-linear viewing of a media, the data packet comprising:

a first field that stores a clip identifier that identifies a portion of a media;

a second field that stores a requested user action concerning the portion identified by the clip identifier; and

a third field that stores metadata associated with the portion identified by the clip identifier, where the metadata is employed to adapt one or more clips according to the requested user action.

48. A set of application program interfaces embodied on a computer-readable medium for execution on a computer component in conjunction with a system for annotating and viewing media, comprising:

a first interface that receives media information;

a second interface that receives annotation information associated with the media; and

a third interface that receives user interface information associated with the order in which media will be displayed.

49. A system for user-directed viewing of video, comprising:

means for partitioning a first video into one or more second videos;

means for displaying the one or more second videos; and

means for annotating the one or more second videos to facilitate retrieving at least one of the first video and the one or more of the second videos in response to a user input.

50. A computer readable medium storing computer executable components of a system for media annotation and retrieval, comprising:

an annotating component that annotates a set of media items with a metadata to facilitate retrieving media items related by the metadata;

a playlist generating component that generates a playlist of media items related by a first metadata retrieved in response to a first query;

a presenting component for presenting media items associated with the media item playlist; and

a playlist updating component that updates the playlist based on a second metadata retrieved in response to a second query, where the second metadata is related to the first metadata.

51. A computer readable medium storing computer executable instructions operable to perform a method for annotating and retrieving media items, comprising:

annotating a set of media items with a metadata to facilitate metadata based retrieval of one or more of the set of media items;

receiving a first query related to identifying a media item by a relationship between the media item and a metadata;

retrieving a first metadata responsive to the first query;

generating a playlist of related media items where the media items are related by one or more metadata items in the first metadata;

displaying one or more media items listed in the playlist;

receiving a second query related to identifying a media item by a relationship between the media item and a metadata;

retrieving a second metadata responsive to the second query; and

updating the playlist based on the second metadata.